Experience shows that the microscopic inspection for trichina conducted in some countries is weakened by such an incidence of error and uncertainty that it is untrustworthy, and that it eliminates from the trade only part of the trichinous meat. On account of the uncertainty and untrustworthiness of this microscopic inspection neither meat-inspection systems nor meat dealers are in a position to give scientific assurance that pork, even if inspected microscopically, does not contain this infection. Hence, the public is warned that in spite of any assurance to the contrary given by any person, it is not safe to eat even microscopically inspected pork unless this is thoroughly cooked or unless it is treated by some other safeguarding process that kills the trichinæ.

Pork, despite the presence of trichinæ, if otherwise sound, is rendered fit for food if properly and thoroughly cooked; but no pork or pork product of any kind is fit for human consumption unless it is first prepared so as to destroy any trichinæ which may be present. Trichinæ may be destroyed by exposure to a freezing temperature not higher than 5° F. for 20 days, or by certain special curing processes; but as these methods are not generally applicable, thorough cooking is the only means that is available to the consumer under usual conditions of rendering fresh or cured pork safe for food.

SMALLPOX IN PORTO RICO, 1916.

By W. W. KING, Surgeon, United States Public Health Service, chief quarantine officer for Porto Rico.

On May 4, 1916, the presence of smallpox in San Juan, P. R., was announced by the director of sanitation, and this announcement was soon followed by reports of cases from other places in Porto Rico, particularly Trujillo Alto, a small town about 12 miles eastward from San Juan. To June 17 the following cases had been reported, but it is now known that a considerable number of cases had occurred in San Juan prior to the above date.

Cases reported to June 17, 1916.

Arecibo	14	Loiza	39
Arroyo	8	Mayaguez	13
Barceloneta	4	Patillas	1
Barros	3	Rio Piedras	10
Bayamon	14	San Juan	242
Caguas	4	San Lorenzo	4
Camuy	1	Trujillo Alto	100
Carolina	2	Utuado	4
Cataño	2	Vega Baja	1
Cidra	2	Vieques	1
Fajardo	3	Yabucoa	1
Gurabo	18		
Humacao	2	Total	502
Juncos	9		

Of the 502 cases reported, 2 resulted fatally at Trujillo Alto.

The first cases reported in San Juan came from that portion of the city known as Puerta de Tierra, inhabited chiefly by laboring people, white and black, who live under precisely those conditions favorable to the spread of smallpox. Energetic measures were at once instituted and investigation revealed numerous foci of infection located chiefly in two streets, San Augustin and San Andres. Scattered foci were also found in San Juan proper and the suburb, Santurce.

As rapidly as possible the patients were removed to the isolation hospital, some 66 persons being admitted during the first week. To meet the abnormal demand upon this hospital, beyond its normal capacity, additional quarters were provided by the conversion of a large warehouse, in the same grounds, into a temporary hospital.

The form of the disease has been mild, as a rule, so much so that it has led some persons unfamiliar with the disease in its mild forms to raise the question of its being genuine smallpox. Severer forms have not been wanting, however, and probably 7 or 8 per cent of the cases may be so classed. Two deaths have occurred to date (June 22).

Vaccination, particularly in Puerta de Tierra, was promptly begun with the supply of virus on hand. Cabled rush orders brought additional and ample supplies, and vaccination has been vigorously pushed with the result that the outbreak is apparently under control in San Juan, although it may require further time to completely eradicate it. In all, more than 40,000 persons have been vaccinated.

The announcement of the presence of the disease, the number of cases and their distribution came as an unpleasant shock to the public generally. An important factor which undoubtedly obscured the situation was the simultaneous widespread prevalence of chicken-pox. There can be no question that true chicken pox had been prevalent for some months. I personally have seen a number of typical cases varying from mild to severe. As evidence of its nonidentity with smallpox, I may cite four cases of my own observation. Vaccination gave typical positive "takes" on three children who had recently had chicken-pox. In one instance the vaccination had been done immediately after disappearance of the chicken-pox eruption. A fourth child developed severe chicken-pox before complete healing of a rather marked vaccination "take." Similar instances are reported by various physicians, including a case where smallpox was contracted a short time after recovery from chicken-pox. Both diseases attacked children, and a few cases, at least, of chicken-pox occurred in adults. On the other hand, the cases which I saw at the isolation hospital during the first days of the outbreak were typical smallpox and easily distinguishable as such except in a few instances, where after mild attacks convalescence was so far advanced that diagnosis

was difficult. Confusing cases did occur, presenting symptoms and eruptions which were not distinctive yet suggestive of either disease.

Whether the present outbreak started from imported cases or from those previously existing in Porto Rico, can not now be determined. The disease had existed so long a time previous to discovery and so many persons had been attacked, that it was not possible to trace it back to its origin.

The general vaccination under the early military government attempted to include the entire population of the island, but unquestionably thousands of persons managed to avoid it. During the succeeding years more or less vaccinations were done, sometimes many thousands, but the increase of population by birth and immigration has exceeded the number of vaccinations, hence there has been a varying but constant increase in the number of persons nonimmune to smallpox, which number has further been augmented by those whose immunity conferred by vaccination has gradually worn off.

PUBLIC HEALTH ADMINISTRATION IN NEBRASKA.

By CARROLL FOX, Surgeon, United States Public Health Service.

The following report gives the results of a study of public health organization and administration in the State of Nebraska, carried on through a period of approximately six weeks from March 15, 1916, to May 1, 1916.

Nebraska has an area of 76,808 square miles, contains 93 counties, and had a population on July 1, 1915, estimated at 1,258,624. There are but two large cities in the State—Omaha, with an estimated population of 163,200, and Lincoln, with an estimated population of 46,028. The eastern part of the State is by far the most populous. The principal industries are grain and cattle raising, and to a lesser extent dairying. Manufacturing is of minor importance.

During the course of the study the following places were visited: Omaha, Lincoln, Grand Island, Hastings, North Platte, Kearney, Seward, Columbus, and Ashland.

For information and assistance obtained during the study the writer is indebted to the various State and local officials and others interested in the subject of the public health.

THE STATE BOARD OF HEALTH.

Composition of the board.—The State board of health is composed of the governor, the attorney general, and the superintendent of public instruction. The governor is ex officio chairman and the superintendent of public instruction is secretary of the board.